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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,935	03/07/2001	Iris M. Plaxton	SC11641TS	5642
23125	7590	06/16/2005	EXAMINER	
FREESCALE SEMICONDUCTOR, INC. LAW DEPARTMENT 7700 WEST PARKER LANE MD:TX32/PL02 AUSTIN, TX 78729			TANG, KENNETH	
			ART UNIT	PAPER NUMBER
			2195	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/800,935

Applicant(s)

PLAXTON ET AL.

Examiner

Kenneth Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the Amendment filed on 8/30/04. Applicant's arguments have been fully considered but are moot in view of the new grounds of rejections.
2. Claims 1-52 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-4, 7-9, 12-25, 27-29, 32-41, 43-48, and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (hereinafter Chan) (US 6,470,494 B1) in view of Brandt et al. (hereinafter Brandt) (US 4,695,950), and further in view of Bracha et al. (hereinafter Bracha) (US 6,763,397 B1).**

4. As to claim 1, Chan teaches a method for pre-internalizing program files, comprising:
receiving a program file (*col. 1, lines 6-8*);
pre-internalizing the program file of a virtual machine to create a reusable executable image of the program file (*col. 1, lines 7-25*); and
storing the reusable executable image in a permanent memory (ROM, for example),
wherein the reusable executable image is capable of being executed by any subsequent

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invocation of the virtual machine without being internalized prior to execution (*col. 1, lines 26-31*).

5. Chan fails to explicitly teach that the pre-internalizing (translating) be done into a native memory structure of the virtual machine. However, Brandt teaches virtual machine native mode translations (*col. 3, lines 21-22, col. 11, lines 67-68*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of pre-internalizing (translating) be done into a native memory structure of the virtual machine because it will allow for reformatting into a compatible format. Chan and Brandt fail to explicitly teach avoiding internalizing the program file for subsequent program executions. Bracha teaches pre-internalizing into memory for a virtual machine system and if it is determined that it is needed for execution, it accesses it for execution but only if it is necessary and if it's already been loaded (*see Abstract, col. 16, lines 63-67, col. 17, lines 1-3, etc.*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of avoiding internalizing the program file for subsequent program executions because this allows for "lazy loading", which amounts to less work for the system (*see Abstract, col. 1, lines 30-35, col. 2, lines 7-9, etc.*).

6. As to claim 2, Chan teaches wherein pre-internalizing is performed by the virtual machine (*col. 1, lines 15-18*).

7. As to claim 3, Chan teaches wherein pre-internalizing is performed by a first device (*claim 16*).

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8. As to claim 4, Chan teaches wherein the virtual machine executes on the first device (*col. 3, lines 45-49*).

9. As to claim 7, Brandt teaches wherein the reusable executable image is stored in a permanent memory of a second device (*native device or guest device, col. 2, lines 26-42*).

10. As to claim 8, Brandt teaches wherein the second device natively executes the virtual machine (*col. 2, lines 26-42*).

11. As to claim 9, Brandt teaches wherein the first device natively executes the virtual machine (*col. 3, lines 21-22, col. 11, lines 67-68*).

12. As to claim 12, Brandt teaches wherein the first device does not natively execute the virtual machine (*col. 3, lines 21-22, col. 11, lines 67-68*).

13. As to claim 13, Chan teaches: changing memory location of the reusable executable image and updating memory addresses within the reusable executable image to reflect a new memory position (*col. 3, lines 1-13*).

14. As to claim 14, Chan teaches:

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moving the reusable executable image to a different location within the permanent memory to create a second reusable executable image (*col. 3, lines 1-13*).

15. As to claim 15, Chan teaches: updating memory addresses within the second reusable executable image (*col. 3, lines 1-13*).

16. As to claim 16, Chan teaches removing the reusable executable image from the permanent memory (*col. 3, lines 1-13*).

17. As to claim 17, Chan teaches wherein the reusable executable image is capable of being executed directly from the permanent memory (*col. 2, lines 47-67 through col. 3, lines 1-12*).

18. As to claim 18, Chan teaches wherein after storing the reusable executable image, the reusable executable image may be executed without referencing the program file (*col. 2, lines 47-67*).

19. As to claim 19, it is rejected for the same reasons as stated in the rejection of claim 1. In addition, Chan teaches determining whether a reusable pre-internalized image of the selected program file has been created, wherein the reusable pre-internalized image is capable of being executed without subsequently internalizing the selected program file prior to execution and if a reusable pre-internalized image of the selected program file has not been created, selectively pre-initializing, comprising: creating the reusable pre-internalized image of the selected program file;

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and storing the reusable pre-internalized image of the selected program file into memory (*col. 2, lines 47-67*). Chan fails to explicitly teach having a pre-internalization mode for when the virtual machine is pre-internalizing. However, Brandt teaches virtual machine native mode translations (*col. 3, lines 21-22, col. 11, lines 67-68*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of pre-internalizing (translating) be done into a native memory structure of the virtual machine because it will allow for reformatting into a compatible format.

20. As to claim 20, Chan teaches the process of claim 19 further comprising:

if a reusable pre-internalized image of the selected program file has not been created, selectively operating the virtual machine in the pre-internalization mode is performed in response to a user request (*col. 2, lines 47-64*).

21. As to claim 21, Chan teaches wherein if the reusable pre-internalized image of the selected program file has not been created, automatically operating the virtual machine in the pre-internalization mode (*col. 2, lines 47-67*).

22. As to claim 22, it is rejected for the same reasons as stated in the rejection of claims 19 and 20.

23. As to claim 23, it is rejected for the same reasons as stated in the rejection of claims 4 and 20.

24. As to claim 24, Chan teaches wherein selectively entering the pre-internalization mode is performed in response to a user request (*col. 2, lines 47-64*).
25. As to claim 25, it is rejected for the same reasons as stated in the rejection of claim 4.
26. As to claim 27, it is rejected for the same reasons as stated in the rejection of claim 1.
27. As to claim 28, it is rejected for the same reasons as stated in the rejection of claim 9.
28. As to claim 29, it is rejected for the same reasons as stated in the rejection of claim 7.
29. As to claim 32, it is rejected for the same reasons as stated in the rejection of claims 7 and 8.
30. As to claim 33, it is rejected for the same reasons as stated in the rejection of claim 11.
31. As to claim 35, it is rejected for the same reasons as stated in the rejection of claim 15.
32. As to claim 36, it is rejected for the same reasons as stated in the rejection of claim 14.
33. As to claim 37, it is rejected for the same reasons as stated in the rejection of claim 27.

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34. As to claim 38, it is rejected for the same reasons as stated in the rejection of claim 14 and 15.

35. As to claim 39, it is rejected for the same reasons as stated in the rejection of claim 17.

36. As to claim 40, it is rejected for the same reasons as stated in the rejection of claim 16.

37. As to claim 41, it is rejected for the same reasons as stated in the rejection of claim 18.

38. As to claim 43, Chan teaches wherein the device is a server (*col. 7, lines 1-16*).

39. As to claim 44, it is rejected for the same reasons as stated in the rejection of claim 19.

40. As to claim 45, it is rejected for the same reasons as stated in the rejection of claim 20.

41. As to claim 46, it is rejected for the same reasons as stated in the rejection of claims 14-16.

42. As to claim 47, it is rejected for the same reasons as stated in the rejection of claim 16.

43. As to claim 48, it is rejected for the same reasons as stated in the rejection of claim 20.

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44. As to claim 51, it is rejected for the same reasons as stated in the rejection of claim 15.

45. As to claim 52, it is rejected for the same reasons as stated in the rejection of claims 15 and 20.

46. **Claims 5-6, 10-11, 26, 30-31, 42, and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (hereinafter Chan) (US 6,470,494 B1) in view of Brandt et al. (hereinafter Brandt) (US 4,695,950), in view of Bracha et al. (hereinafter Bracha) (US 6,763,397 B1), and further in view of Applicant's Admitted Prior Art in the Specification (hereinafter AAP).**

47. As to claim 5, Chan in view of Brandt fails to explicitly teach wherein the first device is a portable device. However, AAP teaches that it is well known to have portable devices such as cellular phones, pagers, and personal digital assistants as devices embedded with Java (*page 1, lines 17-26*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of having the device being a portable device because it increases the convenience to the user to have the device be mobile and not stationary.

48. As to claim 6, it is rejected for the same reasons as stated in the rejection of claim 5.

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49. As to claim 10, it is rejected for the same reasons as stated in the rejection of claim 5.

50. As to claim 11, it is rejected for the same reasons as stated in the rejection of claim 5.

51. As to claim 26, it is rejected for the same reasons as stated in the rejection of claim 5.

52. As to claim 30, it is rejected for the same reasons as stated in the rejection of claim 5.

53. As to claim 31, it is rejected for the same reasons as stated in the rejection of claim 6.

54. As to claim 34, it is rejected for the same reasons as stated in the rejection of claim 6.

55. As to claim 42, it is rejected for the same reasons as stated in the rejection of claim 6.

56. As to claim 49, it is rejected for the same reasons as stated in the rejection of claim 5.

57. As to claim 50, it is rejected for the same reasons as stated in the rejection of claim 6.

Response to Arguments

58. During patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during

prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

59. Applicant's arguments have been fully considered but are moot in view of the new grounds of rejections.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
6/11/05

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